

SN. 10/743,654

ATTORNEY DOCKET NO. FUJI:284

REMARKS

Applicant respectfully requests that the foregoing amendments be made prior to examination of the present application, and respectfully requests reconsideration of the present application in view of the foregoing amendments and the reasons that follow.

This amendment adds, changes and/or deletes claims in this application. A detailed listing of all claims that are, or were, in the application, irrespective of whether the claim(s) remain under examination in the application, is presented, with an appropriate defined status identifier.

Claims 1-14 are pending. Claims 1 and 3 have been amended. Claims 15-17 have been added as supported by the description in paragraphs 0018 and 0026, *inter alia*. Claims 1-17 are currently pending.

Claims 1 and 3 are rejected under the second paragraph of Section 112. Claims 1 and 3 have been amended to delete the word "type."

Claims 1-8 and 10-14 are rejected under Section 102(b) based on Suzuki *et al.* (US 6,086,739). The examiner alleges that Suzuki "teaches the deposition of monatomic layers of Co or Fe alternating with monoatomic layers of Pt." No portion of Suzuki is identified in connection with this alleged "teaching" and a careful perusal of the text by applicant has been unable to reveal the basis for this comment. Indeed, applicant has created a Word document from the online text of Suzuki and done a word search for the words monoatomic, monatomic, laminate, laminating, alternate and alternating, and none of these words are found in the document, with the exception of "alternating" which is found at the bottom of column 5 in an unrelated context ("The magnetic property is evaluated by an alternating gradient force magnetometer").

To the contrary, the magnetic layer in Suzuki is manufactured by sputtering using an FePt alloy target. For example, column 6, lines 45-47 discloses that "FePt was deposited in a film thickness of 43 nm by a 'rf sputter deposition method' using an FePt alloy target at a substrate temperature of 450°C." As noted in paragraph 0039 of applicant's specification

As described so far, the lamination method of ordered alloys according to the present invention can remarkably lower the

SN. 10/743,654

ATTORNEY DOCKET NO. FUJI:284

ordering process temperature for CoPt and FePt as compared with a conventional sputtering method using a target of CoPt or FePt alloy or a conventional co-sputtering method in which cobalt (or iron) and platinum are simultaneously sputtered. Therefore, the restriction on substrate material selection has been eliminated and coarsening of grains, which intensify interaction between grains, due to a thermal process has been suppressed. (Emphasis added)

Sputtering using an alloy target as disclosed in Suzuki does not disclose a magnetic recording layer formed by alternately laminating an iron or cobalt layer having thickness in a range of 0.1 nm to 0.3 nm and a platinum layer having thickness in a range of 0.15 nm to 0.35 nm repetitively, as recited of claim 1.

A plurality of layers may be used in the underlayer in Suzuki, but not in the magnetic layer. Thus, in the discussion immediately following a description of symmetric property of the underlayer, Suzuki notes that "to improve orientation of the underlayer crystal plane (100) or to control the recording property, a plurality of layers may be formed" (column 4, lines 44-46). This disclosure clearly describes the underlayer. Suzuki also notes in the last paragraph of column 7 that "FePt thin film mediums were formed in the same layered structure as in Embodiment 1." The layered structure referred to is the layered structure of the *medium*, i.e., substrate, underlayer, and ordered alloy layer. Had the structure of the FePt film itself been intended, the sentence would read "FePt thin films" and not "FePt thin film *mediums*." This is consistent with the usage of "medium" and "film" elsewhere in the document. Clearly, no anticipation of claim 1 based on Suzuki is sustainable.

Claim 9 is rejected under Section 102(b) or Section 103(a) based on Suzuki. As just noted, Suzuki fails to disclose a magnetic recording layer as recited in claim 1. Suzuki also fails to suggest such a medium. Therefore, no *prima facie* case of obviousness exists based on Suzuki.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested. The Examiner is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

SN. 10/743,654

ATTORNEY DOCKET NO. FUJI:284

If there are any problems with this response, Applicant's attorney would appreciate a telephone call. In view of the foregoing, it is believed none of the references, taken singly or in combination, disclose the claimed invention. Accordingly, this application is believed to be in condition for allowance, the notice of which is respectfully requested.

Respectfully submitted,
ROSSI, KIMMS & McDOWELL LLP

05/19/05
DATE


MARC A. ROSSI
REG. NO. 31,923

P.O. Box 826
ASHBURN, VA 20146-0826
703-726-6020 (PHONE)
703-726-6024 (FAX)